

FIELD NATURALISTS' CLUB OF BALLARAT

EXCURSION / NEWS SHEET

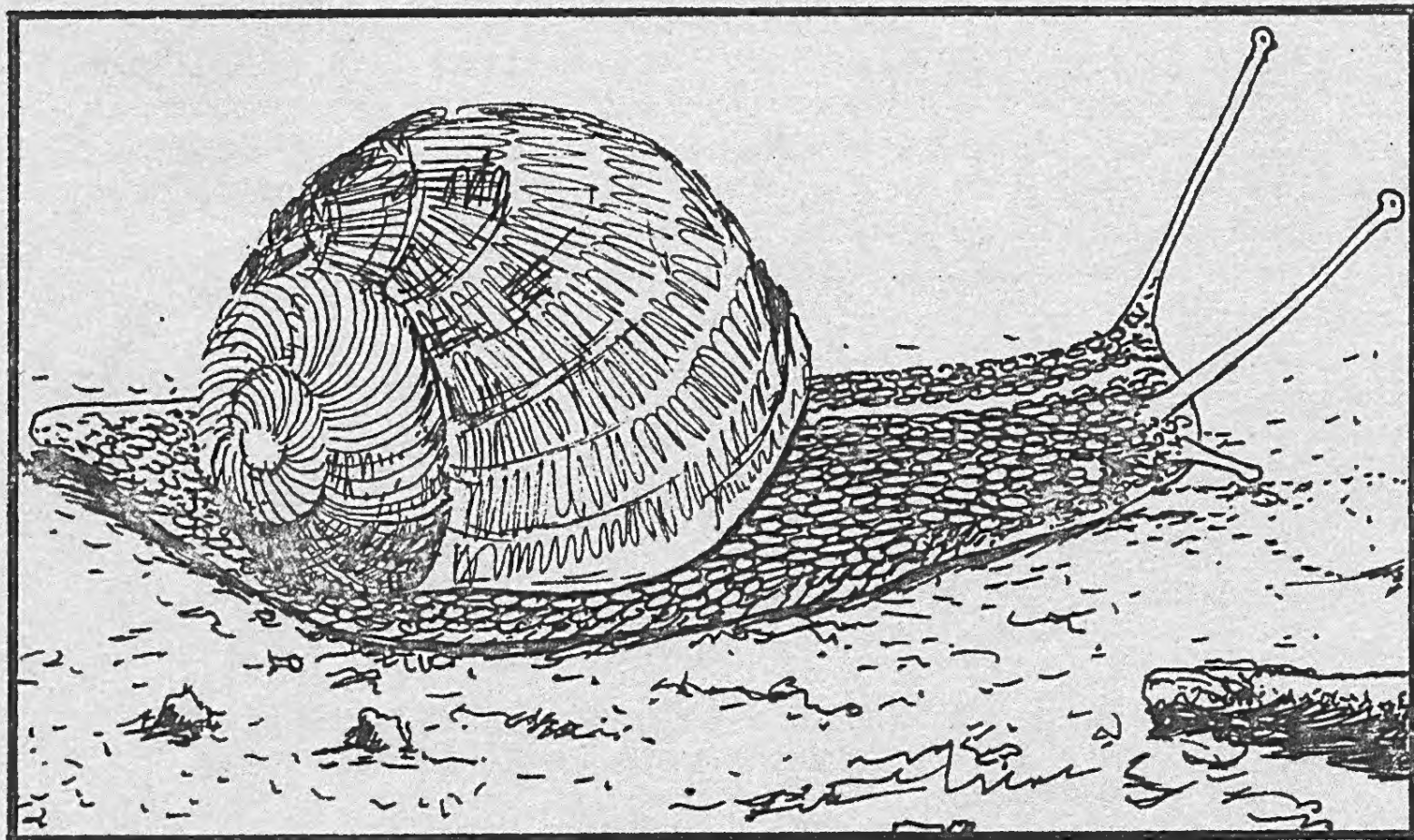
MARCH 1980

Meeting.. 7th MARCH: ANNUAL MEETING. Speaker Mr. E. Bound. "Flora and Fauna of Groote Eylandt".

Meeting.. 28th MARCH: (In lieu of 4th April) Speaker Greg. Binns, "Application of Bird Watching."

Excursion. There will be no excursion on 9/3/80, owing to holiday week-end: SATURDAY 29/3/80 "Autumn Orchids in the

Excursion Brisbane Ranges" Leader Lindsay Fink. Half-day: SUNDAY 30th MARCH, "A Half Day in Mr. Alan Scnsee's Garden". Leaving Crockers Corner at 1.30 p.m.



President: Mr. R. BORCH Phone 42 8630;
Vice-President: Mr. G. BINNS Phone 32 3670;
Secretary: Miss H. BURGESS Phone 31 2210;
Treasurer: Mr. S. REYNOLDS. Phone 32 7721
Editor: Mrs. B. GRAY. Phone 32 2130

Meetings, as specified, are held in the Administration Building of the School of Mines and Industries, Lydiard Street South, Ballarat, commencing 8 pm.
EXCURSIONS, AS SPECIFIED, COMMENCE FROM CROCKERS, Cnr. STURT and ARMSTRONG STREETS, BALLARAT, AT 9.30 am FOR FULL DAY OUTINGS, OR AT 1.30 pm FOR HALF DAY.

W.V.F.N.C.A. CAMP-OUT PT. CAMPBELL 11th - 13th April 1980.

Notice has been received that sandshoes are recommended for investigating rock pools on the Saturday afternoon excursion. Tours will also be undertaken to Melba Gully and Pt. Campbell National Park.

A number of Australian Native Plants will be available for purchase at the Camp-Out. Proceeds for the "A. C. Beuglehole" Publishing Fund. A comprehensive list is tabled at this meeting and orders will be taken for plants required.

CLUB MEMBERSHIP FEES are due at the Annual Meeting tonight.

THE CRESWICK FIELD NATURALISTS' CLUB is celebrating its Silver Jubilee at its March 20th meeting at St. John's Church of England Parish Hall, Napier St. Creswick. Mr. J. Wheeler, M.B.E. will be guest speaker. Our members are invited to attend.

EDUCATION CENTRE DISPLAY: Field Naturalists' Club of Ballarat has been allocated the dates 28th April - 9th May to stage a display in the foyer at the Education Centre in Hopetoun St. (Behind St. Paul's Church and Hall). Anyone willing to help please contact the President or Secretary.

PHOTOFLORA '80

A ninety minute screening of top quality
Australian Nature Pictures
Flowers and Plants Birds and Wildlife
Monday 14th April at 8 p.m.
St. Pauls Hall, Victoria St.

Presented by the Native Plants Preservation Society
of Victoria in conjunction with Field Naturalists'
Club of Ballarat.

SYLLABUS 1980 - 81: A comprehensive and interesting syllabus of meetings and excursions has been drawn up and will be available for distribution at the April meeting.

NOTES ON DR. BRIAN SMITH'S LECTURE

FIELD NATURALISTS' CLUB, BALLARAT

FRIDAY 8th FEBRUARY, 1980

Many of the Field Naturalist Club's guest speakers have shown by description and detailed slides that "small is beautiful", so Dr. Brian Smith's lecture added "Australian Land and Freshwater Snails" to the growing list of flora and fauna that need to be more widely recognized for the role they have in our ecological system.

The contrasting environment that land snails have adapted to invited discussion among the members as amazement was shown that a species can survive in the harsh conditions of inland Australia. Comparing this species then with a carnivorous snail that has its habitat in the wet litter of rain forests. As well, is the ability of this genus to adapt to Alpine conditions of, for example, Lake Pedder in Tasmania, and the high saline situations of inland waters, for example, Lake Corangamite.

For easy reference, Dr. Smith referred to the six major fauna regions of Australia and indicated the inter-relation of the species from region to region. The south-east region has the greatest diversity of both land and freshwater snails.

In making reference to snail's development and adaptability to environment assuming a north to south movement, Dr. Smith told of the similarity between the alpine species in Tasmania with a species in Southern Chile thus giving further evidence to the theory of the land mass drift.

As with non-native flora and fauna of other species, the introduced snails do cause a major concern, for example the white snails of the wheat belt and the large African snail.

Another concern is the part snails play in the health of both animals and humans. The snail is an intermediate host for the fluke which affects sheep, and in the tropics, thousands of people are affected by the blood fluke which

causes the sleeping sickness disease. Fortunately the latter disease is not endemic to Australia, but northern health authorities and agriculturists keep close watch to prevent infestations here.

There are several facts still remaining unsolved in complete picture of snails. In some species the snail starts life as a male and is later able to change sex and reproduce. The detail of this remains unknown. Also researchers do not understand how the carnivorous snail attacks its prey as there is no apparent poison to paralyse the victim.

The manner of the shell formation is known for the shell is secreted from behind the lip and grows in a circular fashion. The growth of the shell is affected by environmental change and so the age of the snail cannot be determined from the shell in the same way as the age of a tree can be taken from the growth rings.

Margaret Tonkin.

ANGLESEA EXCURSION - 3.2.1980

A small party of members made the journey to Anglesea. On the way down we saw quite a number of brown hawks, also nankeen kestrel, swamp harrier, white faced and white necked heron and straw-necked ibis. A magnificent pair of wedge-tailed eagles were riding the thermals on our return trip and we saw grebes, martins, wood duck and plovers on a dam out of Anglesea.

Miss Mary White welcomed us on our arrival at Anglesea and we were shown a white-plumed honeyeater's nest with three young on a low branch of a liquidambar in her garden.

Miss White had planned a 33 km scenic circuit through the bushland behind Anglesea. We saw many Banksias, dwarf She-oaks, Hedge, Myrtle and Sweet Wattles, Grass Trees, Pea flowers, Everlastings, Ti-trees, Smoke Bush, many varieties of Heath, Black Wattles, Black She-oaks, Manna Gums, Peppermint Eucalypts.

It's very interesting to note the changes in the growth and variety as the road winds up and down through different sections of the forest. The Alcoa complex was noted, where

vast brown coal mining is underway, to generate electricity.

Evidence was seen of many flowers to bloom in the Spring. Some which were out were Blue Bottle Daisy, Pink Centaury, pale mauve Vanilla Lily, Fringe Lily, blue Lobelia, Fringe Myrtle, yellow Hibbertia, Tetratheca, to name just a few. We were intrigued to find perfect specimens of both Small and Large Duck Orchids; also Horned, Tongue and Hyacinth Orchids.

The day was most enjoyable, and participants were very grateful to Miss White for her leadership and untiring efforts to make the tour a success. Thank you Miss White!

Betty Gray

ENFIELD FOREST PARK ADVISORY COMMITTEE:

On Monday 11th February 1980 I attended the Enfield Forest Park Advisory Committee meeting as replacement for the late Mrs. Stella Bedggood. After a brief meeting at Forestry Commission Offices in Lydiard St. the committee Mr. J. Brisbane F.C., Mr. J. Clements F. & W.L., Mrs. Bon Strange and myself made an inspection of various problem areas at Enfield Park. These included blackberries, off-road trail bike riding, metal detecting, scarring, fuel reduction burning program and future developments. Some are readily solvable but others require more thought and research.

Further meetings are to be held. If anyone has any thoughts of, or ideas on Enfield Forest Park please forward.

Peter L. Fry

Conservation is not the negative protection of the past but the positive provision for the future.

National Museum of Victoria

MOLLUSCS OF VICTORIA

by J. Hope Black
Former Curator of Molluscs

Introduction:

The molluscs are soft bodied animals without internal bony structure and typically have an external shell that protects the body. The body has no external appendages and their means of movement is by a flat muscular plate called a foot. The actual shape and method of use of this foot is variously modified in the major groups or classes of molluscs.

They are commonly called "Shellfish", which is a suitable descriptive name, but unfortunately often used in a wider sense to include the crabs and crayfish and even sea urchins, etc. - animals which are far removed in body organisation from the molluscs and whose "shells" are in fact not shells at all, but the calcium reinforced external layer of the body.

The typical mollusc has an elongated body with a head region with eyes, one or two pairs of tentacles, and a mouth leading into the digestive tract. There is no brain but nerve ganglia co-ordinate the body functions. The mouth is furnished with jaws and a long ribbon composed of horizontal rows of rasping teeth, called the radula. The number, shape, and size of the radula teeth vary considerably in the various families. Herbivorous molluscs, such as the land snails, have a radula formed of rows of many similar small teeth which when magnified remind one of the carpenter's rasp. On the other hand, each row of teeth of the radula of the carnivorous Octopus consists of a few large, sharp, and variously cusped teeth suitable for tearing the flesh of its victims.

Behind the head the molluscan body is sac-like without appendages. In the more primitive forms the alimentary canal is a straight tube consisting of stomach and intestines and with a large digestive gland or liver. However, this primitive form is modified in most groups and in the snails the entire visceral mass becomes twisted into a hump on the animal's back.

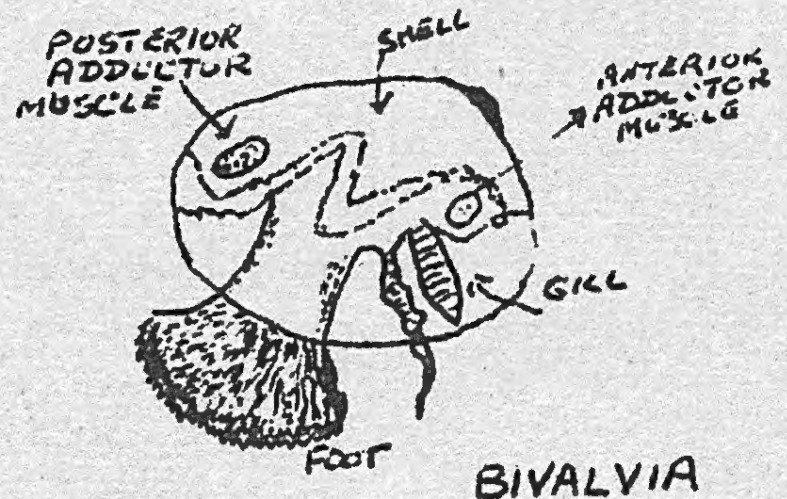
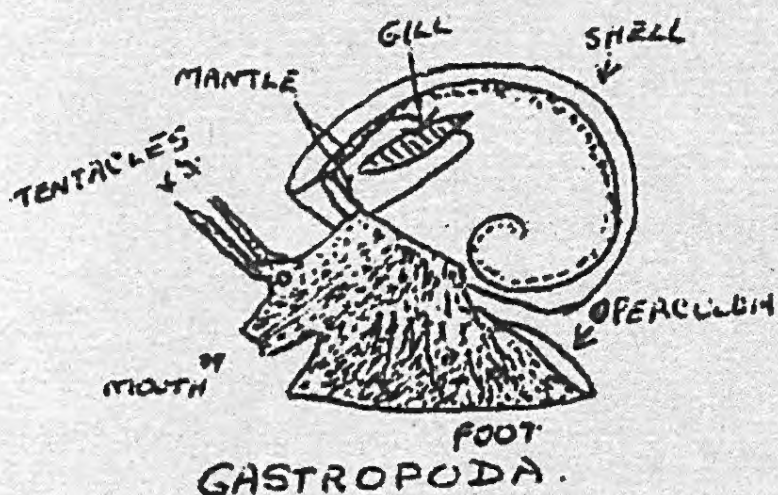
The shell is typically large enough to enclose the whole body and is coiled to conform to the spiral of the visceral mass. It is secreted by the outer skin or mantle of the animal and is laid down in three parts. The outer two are secreted by the cells on the borders of the mantle, and the shell lining layer, which may or may not be pearly (nacreous), is laid down by the external cells of the entire mantle. The minute embryonic shell is formed very early in the mollusc's life and as the animal grows, the cells of the edge of the mantle add to the lip and the surface of the mantle lines the additional area with the inner calcareous layer to conform to the older portion of the shell.

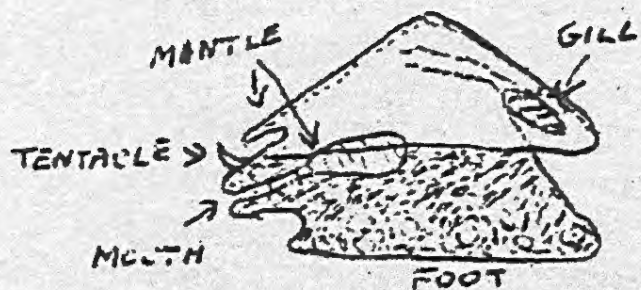
Molluscs usually have separate sexes but in some forms the male and female organs are both carried in the one animal which is said to be hermaphrodite. Eggs are produced and these may hatch either into miniature adults or, in many marine forms, as free swimming larvae (veliger) which float and swim in the water before settling down to grow into the more sedentary adult.

ECOLOGY OF MOLLUSCS-

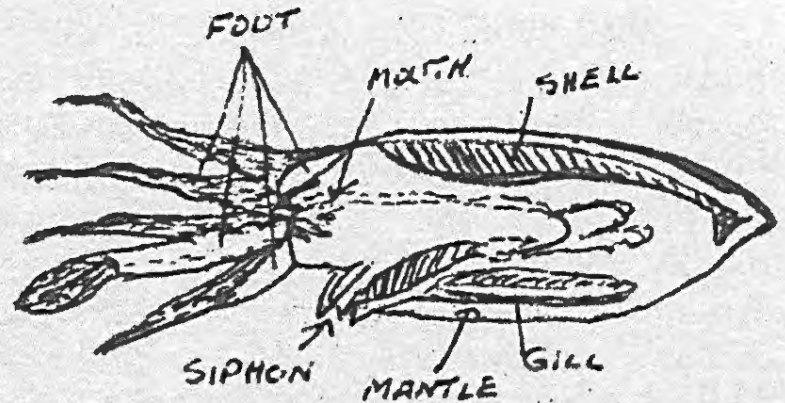
The molluscs are inhabitants of all types of environments from the mountain tops to the depths of the sea. Thus they can be classified by their ecology into the inhabitants of the three major habitat types - land, fresh water, and marine - as well as on their body structure.

The various classes as already described show unequal preferences for each of these habitats. The Chitons, Tusk Shells, and Cephalopods are all marine, the Bivalves are marine and fresh water, and the Gastropods are found in all three types of environment and have become equally well adapted to each of them.





MONOPLACOPHORA



CEPHALOPODA

EDITOR'S THANKS

As this is my last news sheet (after four years) I would like to say "thank you" to the many people who have helped me throughout this time.

In the early days Greg. Binns and the Late Mrs. Stella Bedggood were a tower of strength and encouragement.

Of later times, I would like to thank Helen Burgess for her un-ending support, Graham Hawley for his lovely drawings for the front cover, Margaret Tonkin for her report on each monthly meeting, and all the various members who have contributed articles and reports when I have asked them, or voluntarily. Without all this help, I could not have done the job, and thank you one and all most sincerely.

Jack Netherway will be needing your support too, and I'm confident he will receive the same encouragement that I have. His address is 22 Ripon St. Nth., Ballarat, Phone 327296.

Thank you all once again.

Betty Gray
